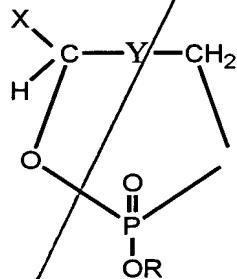


AMENDMENTS TO THE CLAIM

1. (original) A method for inducing promotion of neural cell differentiation of target cells comprising contacting said target cells for a suitable period of time with an effective amount of a compound of the general Formula I



wherein

Y is  $-(CH_2)_m-$ ,  $-\text{CH}(\text{OH})-$  or  $-\text{C}(=\text{O})-$  and m is 0-3;  
X is H, alkyl,  $-\text{CH}_2\text{OH}-$ ,  $\text{CH}_2\text{Oacyl}$  or  $-\text{CH}_2\text{acyl}$ ; and  
R is H, a cation, alkyl or optionally substituted aryl;  
provided that when Y is  $-(CH_2)_m-$ , m=0, and R is H or cation, X  
is not  $\text{CH}_2\text{Oacyl}$ .

2. (original) A method for promoting neural activity in an individual comprising administering to the individual in need an effective amount of a compound of the general Formula I of Claim 1.

3. (currently amended) A method according to Claim 2, wherein said neural activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain, prevention of nerve degeneration and nerve rescue.

4. (currently amended) A method for the prevention or treatment of disorders and diseases which can be prevented or treated by promoting neural cell differentiation and/or neural activity comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 1.

5. (currently amended) A method according to Claim 4, wherein said disorders and diseases are mental disorders or diseases which are at least one of selected from the group consisting of dementia mental disorders and neuro-degenerative disorders or diseases.

*Sch  
D* 6. (currently amended) A method according to Claim 54, wherein said mental disorder or disease is schizophrenia or dementia.

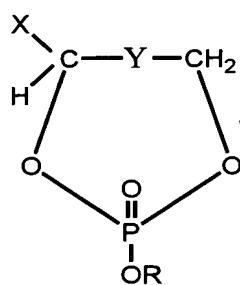
7. (original) A method according to Claim 4,  
wherein said disorders and diseases are neurodegenerative  
disorders or diseases.

*Sab*  
① 8. (currently amended) A method according to claim  
1 wherein the compound of formula I is selected from the group  
consisting of

i. 1,3 cyclic glycerophosphate—1,3—cGP;  
ii. 1,2 cyclic glycerophosphate—1,2—cGP;  
iii. phenyl 1,3 cyclic glycerophosphate—P—1,3—cGP;  
iv. phenyl 1,2 cyclic glycerophosphate—P—1,2—cGP;  
v. 1,3 cyclic propanediol phosphate—1,3—cPP;  
vi. 1,2 cyclic propanediol phosphate—1,2—cPP;  
vii. phenyl 1,3 cyclic propanediol phosphate—P—1,3—cPP;  
viii. phenyl 1,2 cyclic propanediol phosphate—P—1,2—cPP;  
ix. cyclic dihydroxyacetone phosphate—cDHAP; and  
x. phenyl cyclic dihydroxyacetone phosphate—P—cDHAP.

9-16. (canceled)

*Sab*  
① 17. (currently amended) A method for promoting  
neural activity in an individual comprising administering to  
the individual in need an effective amount of a compound of  
the general formula I



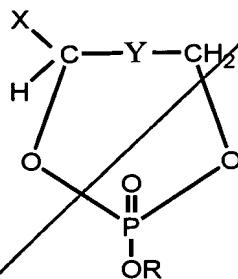
wherein

*WC3*

Y is  $-(CH_2)_m-$ ,  $-CH(OH)-$  or  $-C(=O)-$  and m is 0-3;  
X is H, alkyl,  $-CH_2OH-$ ,  $CH_2Oacyl$  or  $-CH_2acyl$ ; and  
R is H, a cation, alkyl or optionally substituted aryl;  
provided that when Y is  $-(CH_2)_m-$ , m=0, and R is H or cation, X is not  $CH_2Oacyl$ ;

wherein said neuronal activity is selected from the group consisting of promotion of neuronal outgrowth, promotion of nerve growth, provision of dopaminotrophic supporting environment in a diseased portion of the brain, prevention of nerve degeneration condition other than dementia and nerve rescue.

18. (currently amended) A method for the prevention or treatment of disorders and diseases, other than dementia, which can be prevented or treated by promoting neural cell differentiation and/or neural activity, the method comprising administering to a person in need a therapeutically effective amount of a compound of Formula I of Claim 9



wherein

Y is  $-(CH_2)_m-$ ,  $-\text{CH(OH)}-$  or  $-\text{C}(=\text{O})-$ , and m is 0-3;

X is H, alkyl,  $-\text{CH}_2\text{OH}-$ ,  $\text{CH}_2\text{Oacyl}$  or  $-\text{CH}_2\text{acyl}$ ; and

R is H, a cation, alkyl or optionally substituted aryl;

provided that when Y is  $-(CH_2)_m-$ , m=0, and R is H or cation, X  
is not  $\text{CH}_2\text{Oacyl}$ .

19. (original) A method according to claim 18,  
wherein said disorders and diseases are mental disorders or  
diseases.

20. (currently amended) A method according to  
claim 18-19, wherein said mental disorder or disease is  
schizophrenia.

21. (currently amended) A method according to  
Claim 18-19, wherein said mental disorder is a learning  
disability.

22. (original) A method according to claim 18,  
wherein said disorders and diseases are neurodegenerative  
disorders or diseases.

23. (currently amended) A method according to  
Claim 22 18, wherein said neurodegenerative disorder or  
disease is Alzheimer's disease or Parkinson's disease.

24. (currently amended) A method according to  
Claim 17 18, wherein said disorders or diseases result from  
exposure of an individual to harmful environmental factors or  
from a mechanical injury.

25. (currently amended) A method according to  
Claim 17 18, for the treatment of nerve rescue after nerve  
injury.

26. (currently amended) A method according to  
claim 17 18 where the general formula I is selected from the  
group consisting of

- i. 1,3 cyclic glycerophosphate-1,3-cGP;
- ii. 1,2 cyclic glycerophosphate-1,2-cGP;
- iii. phenyl 1,3 cyclic glycerophosphate-P-1,3-cGP;
- iv. phenyl 1,2 cyclic glycerophosphate-P-1,2-cGP;
- v. 1,3 cyclic propanediol phosphate-1,3-cPP;
- vi. 1,2 cyclic propanediol phosphate-1,2-cPP;

*MC5*

- vii. phenyl 1,3 cyclic propanediol phosphate-P-1,3-cPP;
- viii. phenyl 1,2 cyclic propanediol phosphate-P-1,2-cPP;
- ix. cyclic dihydroxyacetone phosphate-cDHAP; and
- x. phenyl cyclic dihydroxyacetone phosphate-P-cDHAP.

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27-36. (canceled)